

## AD 2 AERODROMES

## ESSD 2.1 AERODROME LOCATION INDICATOR AND NAME

## ESSD – BORLÄNGE

## ESSD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

- |    |  |   |
|----|--|---|
| 1. | ARP coordinates and site at AD               | 602520N 0153054E RWY 1100 m in from THR 14  |
| 2. | Direction and distance from (city)           | SSE 4 NM from Borlänge  |
| 3. | Elevation/Reference temperature              | 504 ft/+18.5°C  |
| 4. | Geoid undulation at AD ELEV PSN              | 95 ft   |
| 5. | MAG VAR/Annual change                        | 4° E 2015/+0.1 increasing   |
| 6. | Administration, address, telephone, fax, AFS | AB Dalaflyget<br>Överstevägen 50<br>SE-784 63 Borlänge<br>TEL: +46 (0)243 645 00<br>E-mail: bleinfo@dalaflyget.se<br>AFS: ESSDZTX<br>Website: dalaflyget.se |
| 7. | Types of traffic permitted (IFR/VFR)         | IFR/VFR. Max RWY ref code 4C  |
| 8. | Remarks                                      | -   |

## ESSD 2.3 OPERATIONAL HOURS

- |     |   |  |
|-----|---|--|
| 1.  | AD Administration<br>AD Operating hours | MON-FRI 0700-1500 (0600-1400)<br>H24                                       |
| 2.  | Customs and immigration                 | CUST: O/R +46 (0)8 405 02 50<br>Immigration: MON-FRI 0600-1500 (0500-1400) |
| 3.  | Health and sanitation                   | -  |
| 4.  | AIS Briefing Office                     | FPC H24, +46 (0)8 797 63 40, www.lfv.se/fpc                                |
| 5.  | ATS Reporting Office (ARO)              | FPC H24, +46 (0)8 797 63 40, www.lfv.se/fpc                                |
| 6.  | MET Briefing Office                     | FPC H24, +46 (0)8 797 63 40, www.lfv.se/fpc                                |
| 7.  | ATS                                     | MON-THU 0455-1930 (0355-1830)<br>FRI 0700-1730 (0600-1630)                 |
| 8.  | Fuelling                                | MON-THU 0500-1900 (0400-1800)<br>FRI 0700-1700 (0600-1600)                 |
| 9.  | Handling                                | O/R  |
| 10. | Security                                | O/R  |
| 11. | De-Icing                                | O/R  |
| 12. | Remarks                                 | Increased charges outside TWR HR of OPS                                    |

**ESSD 2.4 HANDLING SERVICES AND FACILITIES**

1.	Cargo-handling facilities	-
2.	Fuel/oil types	Fuel Jet A1, 100LL Oil -
3.	Fuelling facilities/discharge capacity	Jet A1: Truck, 20,000 l, 800 l/min 100LL: Stationary 8000 l
4.	De-icing facilities	Available, Type I and II. De-icing channel 121.780.
5.	Hangar space for visiting ACFT	-
6.	Repair facilities for visiting ACFT	-
7.	Remarks	For 100LL, self service H24 with BP card.

**ESSD 2.5 PASSENGER FACILITIES**

1.	Hotels	In Borlänge
2.	Restaurants	At AD and in the vicinity
3.	Transportation	Buses, taxis, rental cars
4.	Medical facilities	In Borlänge
5.	Bank and Post Office	In Borlänge
6.	Tourist Office	In Borlänge
7.	Remarks	-

**ESSD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

1.	AD category for fire fighting	O/R up to CAT 7, TEL +46 (0)243 645 10
2.	Rescue equipment	By arrangement, municipal rescue service
3.	Capability for removal of disabled aircraft	By arrangement
4.	Remarks	-

**ESSD 2.7 SEASONAL AVAILABILITY – CLEARING**

1.	Types of clearing equipment	Snowploughs, blowers, sweepers
2.	Clearance priorities	RWY, TWY, Apron
3.	Remarks	No snowclearance outside TWR HR of OPS

**ESSD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA**

1.	Apron surface and strength	Apron ASPH PCN 50 F/B/X/U
2.	Taxiway width, surface and strength	TWY A 23 m ASPH PCN 50 F/B/X/U TWY B 10 m ASPH PCN -
3.	ACL, location and elevation	Apron 499 ft
4.	VOR checkpoints	-
5.	INS checkpoints	-
6.	Remarks	-

**ESSD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS**

- |    |   |  |
|----|---|--|
| 1. | Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of ACFT stands | Taxi guide lines and signs   |
| 2. | RWY and TWY markings and LGT  | RWY 14/32: Designator, THR, TDZ, CL and edges day marked RTHL, RENL and REDL<br><br>TWY A: CL, HLDG day marked. Edge LGT, RGL<br>B: CL, HLDG day marked. RGL |
| 3. | Stop bars   | -  |
| 4. | Remarks   | RWY 14/32: REDL located 4.5 m from RWY edge  |

**ESSD 2.10 AERODROME OBSTACLES**

In Area 2					
OBST ID/Designation	OBST type	OBST position	ELEV/HGT in metres	Markings/ Type, colour	Remarks
a	b	c	d	e	f
ESSD1	Forest	602448.9N 0153210.8E	158.9 / -	-	-
ESSD2	Forest	602448.2N 0153211.0E	160.0 / -	-	-
ESSD3	Forest	602432.7N 0153224.5E	166.4 / -	-	-
ESSD4	Forest	602432.0N 0153227.7E	167.3 / -	-	-
ESSD5	Forest	602432.0N 0153246.3E	170.9 / -	-	-
ESSD6	Forest	602430.3N 0153245.1E	171.2 / -	-	-
ESSD7	Forest	602430.1N 0153301.4E	175.4 / -	-	-
ESSD8	Forest	602422.5N 0153257.4E	180.6 / -	-	-
ESSD9	Forest	602414.7N 0153254.4E	185.9 / -	-	-
ESSD10	Forest	602330.2N 0153532.3E	237.4 / -	-	-
ESSD11	Forest	602331.0N 0153535.0E	247.4 / -	-	-
ESSD12	Forest	602329.6N 0153545.7E	261.6 / -	-	-
ESSD13	Forest	602139.3N 0154020.2E	327.3 / -	-	-
ESSD14	Forest	602135.2N 0154016.9E	337.7 / -	-	-
ESSD15	Forest	602553.9N 0152948.9E	162.6 / -	-	-
ESSD16	Forest	602553.2N 0152926.7E	172.0 / -	-	-
ESSD17	Forest	602601.8N 0152903.1E	181.0 / -	-	-
ESSD18	Forest	602611.7N 0152919.8E	185.4 / -	-	-

In Area 3					
OBST ID/Designation	OBST type	OBST position	ELEV/HGT	Markings/ Type, colour	Remarks
a	b	c	d	e	f
Not available					

## ESSD 2.11 METEOROLOGICAL INFORMATION PROVIDED

- |     |   |  |
|-----|---|--|
| 1.  | Associated MET Office   | STOCKHOLM/Arlanda  |
| 2.  | Hours of service<br>MET Office outside hours  | H24  |
| 3.  | Office responsible for TAF preparation<br>Periods of validity, interval of issuance | STOCKHOLM/Arlanda<br>9 HR, <a href="https://tafplanner.smhi.se/app.php/production-program">https://tafplanner.smhi.se/app.php/production-program</a> |
| 4.  | Type of landing forecast<br>Interval of issuance                                    | Not issued   |
| 5.  | Briefing/consultation provided  | FPC H24, +46 (0)8 797 63 40, <a href="http://www.lfv.se/fpc">www.lfv.se/fpc</a>  |
| 6.  | Flight documentation<br>Language(s) used  | TAF, METAR, SIGMET, Upper air winds<br>Swedish/English   |
| 7.  | Charts and other information available for<br>briefing or consultation              | SWC, WC, Nordic SIGWX Chart, Low level forecast  |
| 8.  | Supplementary equipment available for<br>providing information                      | -  |
| 9.  | ATS units provided with information   | BORLÄNGE TWR   |
| 10. | Additional information (limitation of service,<br>etc.)                             | -  |

## ESSD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	True BRG and MAG BRG	Dimensions of RWY (m)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APCH RWY
1	2	3	4	5	6
14	132.41° GEO 128° MAG	2313 x 45	PCN 50 F/B/X/T ASPH	602544.73N 0152959.51E  GUND 95 ft	THR 504 ft
32	312.44° GEO 308° MAG	2313 x 45	PCN 50 F/B/X/T ASPH	602454.32N 0153151.09E  GUND 94.7 ft	THR 493.0 ft TDZ 495.3 ft

Slope of RWY-SWY	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	OFZ	Remarks
7	8	9	10	11	12
14 See ESSD AOC	-	-	2433 x 300	-	-
32 See ESSD AOC	-	-	2433 x 300	-	-

## ESSD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
14	2313	2313	2313	2313	-
32	2313	2313	2313	2313	-

## ESSD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT Type, LEN INTST	THR LGT Colour WBAR	VASIS (MEHT)	TDZ LGT LEN	RWY Centre Line LGT LEN, Spacing Colour INTST	RWY Edge LGT LEN, Spacing Colour INTST	RWY End LGT Colour WBAR	SWY LGT LEN, Colour
1	2	3	4	5	6	7	8	9
14	SALS 420 m LIL/LIH	Green	PAPI Left/3.25° (65.2 ft)	-	-	2313/60 m White Caution zone 600 m yellow LIL/LIH	Red	-
32	Calvert CAT I 900 m LIL/LIH	Green	PAPI Left/3.00° (60.7 ft)	-	-	2313/60 m White Caution zone 600 m yellow LIL/LIH	Red	-
10 Remarks: RWY 14: PCL RWY LIL on channel 127.305 for 10 SEC. RWY 32: PCL RWY LIL on channel 127.305 for 10 SEC.								

## ESSD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1. ABN/IBN location, characteristics and hours of operation -
2. LDI location and LGT  
Anemometer location and LGT Windsock at RWY ends, no LGT, windsock NW apron, lighted.  
NW TWY A and NW GP 32, lighted.
3. TWY edge and centre line lighting Edge: TWY A  
CL: -
4. Secondary power supply/switch-over time Available/15 sec
5. Remarks -

## ESSD 2.16 HELICOPTER LANDING AREA

RWY 14/32 to be used.

## ESSD 2.17 ATS AIRSPACE

1. Designation and lateral limits BORLÄNGE CTR 603458N 0151749E - 602928N 0153754E -  
602018N 0155249E - 601506N 0154349E -  
602058N 0152254E - 603028N 0150919E -  
603458N 0151749E
2. Vertical limits BORLÄNGE CTR 2500 ft AMSL  
GND
3. Airspace classification C
4. ATS unit call sign Language(s) BORLÄNGE TOWER  
Swedish/English
5. Transition altitude 5000 ft AMSL
6. Remarks CTR established during hours of TWR.

## ESSD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Channel/Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	BORLÄNGE TOWER	127.305	HO	Primary channel VDF
		121.500	HO	VDF

## ESSD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid CAT of ILS/MLS (for VOR/ILS/MLS give VAR)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
L 14	BL	421 kHz	H24	602813.3N 0152429.9E		Range 15 NM
LOC 32 ILS CAT I (4° E 2015)	SD	109.50 MHz	H24	602552.8N 0152941.7E		370 m beyond THR 14 ILS Class I/E/2
GP		332.60 MHz	H24	602503.7N 0153140.6E		Angle 3.0° RDH 55.1 ft 314 m past THR 32 right side
OM				602223.8N 0153720.8E		-
MM				602432.7N 0153238.8E		-
L 32	LM	397 kHz	H24	602323.7N 0153505.1E		Range 15 NM
VOR/DME (4° E 2015)	BOR	117.60 MHz	H24	602517.4N 0153109.1E	513 ft	DME channel 123X Limited range of DME within sector 140°-290°

## ESSD 2.20 LOKALA TRAFIKFÖRESKRIFTER

- Samtliga luftfartyg som avser operera till/från Borlänge flygplats skall vara utrustade med VHF-flygradioutrustning som medger dubbelriktad radioförbindelse på kanal 127.305 samt 121.500. Detta gäller även utanför ATS publicerad öppethållning.
- Klarering före uttaxning  
Klarering för IFR-trafik lämnas vid begäran om start-up. Uppgift om transponderkod lämnas under uttaxning.
- Utanför TWR öppethållning skall trafikvarv flygas öster om RWY 14/32, tillämpas när flygning pågår på grässtråk 12/30. Grässtråk 12/30 är beläget väster om banbörjan RWY 14.
- Högervarv tillämpas till grässtråk 12.
- På grässtråk 12/30 sker inget vinterunderhåll. För information om stråkkonditionen kontakta Borlänge Flygklubb TEL 070 479 36 68.
- Efter start RWY 14 eller 32 skall lätta luftfartyg stiga rakt fram till MNM 500 ft GND innan sväng påbörjas, dock skall alltid bullerkänsligt område undvikas.

## LOCAL TRAFFIC REGULATIONS

- All aircraft operating to/from Borlänge aerodrome must be equipped with VHF-radio which allows two-way radio communication on channel 127.305 and 121.500. This is mandatory also outside ATS HR of OPS.
- Clearance at gate  
ATC clearance for IFR traffic will be delivered on request at start-up. Transponder code will be communicated during taxi.
- Outside TWR operational hours the traffic circuit shall be flown east of the main RWY when the grass strip 12/30 is active. Grass strip 12/30 is situated west of the beginning RWY 14.
- Right hand traffic circuit to grass strip 12.
- No snow clearance of grass strip 12/30.  
For information about condition of grass strip 12/30 contact Borlänge Flygklubb TEL +46 (0)70 479 36 68.
- After take-off RWY 14 or 32 light aircraft shall climb straight ahead to MNM 500 ft GND before commencing turn. Noise-sensitive areas shall always be avoided.

- |  |  |
|--|--|
| 7. PPR för all IFR skolflygning, TEL 0243 645 20.  | 7. PPR for all IFR school flights TEL +46 (0)243 645 20.   |
| 8. Skolning, bogsering av segelflygplan och fallskärms-hoppning är endast tillåten MÅN-FRE 0600-2100 (0500-2000) samt LÖR-SÖN 0800-1700 (0700-1600). | 8. School flights, glider towing and skydiving are only allowed MON-FRI 0600-2100 (0500-2000) and SAT-SUN 0800-1700 (0700-1600). |

**ESSD 2.21 MINSKNING AV BULLERSTÖRNING**

1. För jettflygplan och flygplan med MTOM överstigande 7000 kg gäller att start RWY 32 och landning RWY 14 endast är tillåten om vind- eller trafikförhållanden så kräver.
2. För luftfartyg med MTOM överstigande 7000 kg: efter start RWY 32 skall normalt vänstersväng tillämpas. Avsteg från detta tillåts endast om vind- eller trafikförhållanden så kräver.
3. Flygning över tätbebyggt område.
  - a) Vid start och landning med lätta luftfartyg (< 2000 kg) skall sådana trafikvarv följas som innebär att tätbebyggda områden N RWY; Naglarby, Yttre Svärdsjö, Rommeholen, St.Tuna k:a, Långsjö, Västansjö, Skärsjö och Sörbo inte överflygs.
  - b) Ovan angivna byar bör i övrigt inte överflygas under 2000 ft AMSL.
4. Bullerkänsliga områden och byar finns publicerade på sid ESSD 6-1.
5. För jettflygplan som utför upprepade start- och landningsövningar gäller att lägsta tillåtna trafikvarvshöjd är 1500 ft AMSL.

**NOISE ABATEMENT PROCEDURES**

1. For jet ACFT and ACFT with MTOM exceeding 7000 kg take-off RWY 32 and landing RWY 14 only permitted when wind or traffic conditions so require.
2. For ACFT with MTOM exceeding 7000 kg: after takeoff RWY 32, left turn after departure is normal procedure. Deviation from this permitted only due to wind or traffic situation.
3. Flight over densely populated areas.
  - a) On take-off and landing with light aircraft (< 2000 kg) a traffic circuit shall be followed that not causes overflight of built up areas N RWY, Naglarby, Yttre Svärdsjö, Rommeholen, St.Tuna k:a, Långsjö, Västansjö, Skärsjö and Sörbo.
  - b) Overflight of above mentioned villages should be avoided below 2000 ft AMSL.
4. Noise sensitive areas and villages are published on page ESSD 6-1.
5. For jet aircraft making repeated take-off and landing practices a lowest altitude of 1500 ft AMSL in traffic circuit applies.

**ESSD 2.22 FLYGPROCEDURER**

1. Startprocedurer, omnidirectional

**FLIGHT PROCEDURES**

1. Omnidirectional departure procedures

RWY	Procedure	Significant obstacle		
		Obstacle	Elevation (ft)	Direction (GEO)/Dist (m) from THR
14	Climb straight ahead with MNM 325 ft/NM (5,3%) to MNM turning ALT 1600 ft. Continue climb to appropriate MSA.	Tree	1198	149°/7330
		Terrain	1165	148°/7375
		Tree	1195	149°/7390
		Tree	1019	145°/7740
		Tree	1071	144°/8705
		Antenna	2657	255°/20595
32	Climb straight ahead with MNM 280 ft/NM (4,5%) to MNM turning ALT 1600 ft. Continue climb to appropriate MSA.	Antenna	2657	261°/21945

## 2. Lågsiktsprocedurer (LVP)

Banor och tillhörande utrustning.

Bana 14 och 32 är godkända för avgångstrafik när RVR underskrider 550 m, minimum RVR för avgångstrafik är 400 m.

Initiering och verkställande av LVP.

ATC förbereder LVP när RVR underskrider 800 m och/eller molntäckeshöjd/vertikalsikten underskrider 300 ft. LVP träder i kraft när RVR underskrider 550 m och/eller molntäckeshöjden eller vertikalsikten underskrider 200 ft.

Dagermarkering och belysning.

Se ESSD-2-1

LVP beskrivning.

- a) När LVP är i drift tillåts för avgångstrafik endast en rörelse åt gången, ett luffartyg alternativt fordonstrafik.
- b) Luffartygs rörelse på plattor får endast ske efter klarering från ATC.
- c) Väntläge taxibana A kan användas. Luffartyg kommer bli instruerade att invänta taxiklarering på uppställningsplats i avvaktan på trafikavveckling.
- d) När LVP är i drift tillåts normalt endast ett luffartyg åt gången att taxa. Fordon inom manöverområdet är ej tillåtet i samband med avgångstrafik. Undantag ges för fordon som utför mätning av RVR.
- e) In- och uttaxning till RWY 14/32 endast via TWY A.

## 3. VFR-flygning inom Borlänge TMA/CTR

Normala in- och utpasseringspunkter se ESSD 6-1

Väntlägen se ESSD 6-1

Avbrott i radioförbindelse se ESSD 6-1

**ESSD 2.23 ÖVRIG INFORMATION**

1. Modellflygsektor SW gräsbanan upp till 400 ft/120 m AGL. Upprättad under dager. Se ESSD-2-1.
2. Reducerad banseparation tillämpas enligt AIP AD 1.1 mom 10.
3. Omfattande vinchstarter med segelflygplan under sommarsäsong.

## 2. Low visibility procedures (LVP)

Runways and equipment.

Runway 14 and 32 are approved for departures in RVR conditions less than 550 m, minimum RVR for departure is 400 m.

Initiation and termination of LVP.

LVP operations will be prepared by ATC when RVR is below 800 m and/or ceiling/vertical visibility is below 300 ft. LVP will be in force when RVR is below 550 m and/or ceiling/vertical visibility is below 200 ft.

Ground marking and lighting.

See ESSD-2-1

Description of LVP.

- a) Aircraft and vehicle movements will be restricted to one aircraft movement at a time while departures when LVP is active.
- b) Aircraft movements on aprons after clearance from ATC only.
- c) Holding point TWY A can be used. Normally aircraft will be instructed to hold on parking until no other aircraft- or vehicle movements are under way.
- d) Taxiing is normally restricted to one aircraft movement at a time. Vehicles on the maneuvering area are not permitted during departure operations when LVP is active. Exception is made for vehicles manually measuring RVR.
- e) Entry and exit to RWY 14/32 is only permitted via TWY A.

## 3. VFR flight within Borlänge TMA/CTR

Normal entry and exit points see ESSD 6-1

Holdings see ESSD 6-1

Communication failure see ESSD 6-1

**ADDITIONAL INFORMATION**

1. Model flying area SW grass strip up to 400 ft/120 m AGL. Established during daylight. See ESSD-2-1.
2. Reduced runway separation is applied in accordance with AIP AD 1.1 para 10.
3. Extensive winch launching of gliders during summer season.



## ESSD 2.24 TILLHÖRANDE KARTOR

## RELATED CHARTS

AD chart		ESSD 2-1
AOC	RWY 32	ESSD-3-1
AOC	RWY 14	ESSD-3-3
Area Chart		ESSD 4-1
ATC Surveillance Minimum ALT chart		ESSD 4-91
IAC	ILS z or LOC z RWY 32	ESSD 5-1
IAC	ILS y or LOC y RWY 32	ESSD 5-2
IAC	VOR RWY 32	ESSD 5-3
IAC	VOR z RWY 14	ESSD 5-5
IAC	VOR y RWY 14	ESSD 5-6
VAC		ESSD 6-1